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Barbara Klemstine
Director
Regulation & Pricing

Tel. 602-250-4563
Fax 602-250-3003
e-mail Barbara.Klemstine@aps.com

Mail Station 9708
PO Box 53999
Phoenix, Arizona 85072-3999

October 29, 2007

Docket Control
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

RE: Arizona Public Service Company General Rate Case
Docket Nos. E-01345A-05-0816, E-01345A-05-0826, E-01345A-05-0827

Dear Sir or Madame:

Pursuant to Decision No. 69663 (June 28, 2007), Arizona Public Service Company is submitting as a compliance item in the above referenced dockets a report evaluating its programs for receipt inspection and verification of parts prior to installation at the Palo Verde Nuclear Generating Station.

If you have any questions or concerns please contact Jeff Johnson at (602) 250-2661.

Sincerely,

Barbara Klemstine

BK/dst

Attachments

CC: Brian Bozzo

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COMPLIANCE REPORT REGARDING PROGRAMS FOR INSPECTION AND
VERIFICATION OF MATERIALS RECEIVED
AT THE PALO VERDE NUCLEAR GENERATING STATION

On November 9, 2005, the Arizona Corporation Commission (the "Commission") opened Docket No. E-01345A-05-0826 to review the frequency and causes of unplanned outages at the Palo Verde Nuclear Generating Station ("PVNGS" or "Palo Verde"). Commission Staff awarded the contract to conduct this review to GDS Associates, Inc. ("GDS"), which issued its final audit report (the "GDS Report") on August 17, 2006. Among other things, the GDS Report suggested that the Commission should order APS to "evaluate its programs for receipt inspection and verification of parts prior to installation."¹

Subsequently, in Decision No. 69663, dated June 27, 2007, the Commission ordered APS to "evaluate its programs for receipt inspection and verification of parts prior to installation and to submit a report....to the Commission's Docket Control as a compliance item...."² within 120 days of that Decision. APS submits this Report in response to that requirement. Although the Company believes that the 2005 performance issues at Palo Verde were unrelated to any deficiency in its programs to receive, inspect, and verify warehouse inventory, APS is committed to maintaining the highest level of performance. As described herein, to whatever extent the Company's evaluation of its receipt inspection and part verification programs suggested that its processes should be improved, the Company has taken affirmative measures to improve them.

I. Receipt Inspection Evaluation

Palo Verde has a comprehensive set of protocols in place intended to ensure that the parts received at the Palo Verde warehouse are consistent with those ordered and are of sufficient quality for use at the plant. By way of background, all material used in Palo Verde's operations, with the exception of fuel, is received and maintained at the warehouse. At the time the warehouse receives the material, warehouse receipt inspectors list it as either Quality/Safety-related (QR) or Non-Quality-related (NQR). The warehouse then performs a receipt inspection on the material (whether QR or NQR), in which warehouse personnel compare the description and manufacturer part identification number of the material received to the purchase order and the packing slip. Any discrepancy in the material is documented in a Warehouse Discrepancy Notice (as described below), and is electronically routed to the person at the Company who purchased it.

Pursuant to Company policy (Procedure 12DP-0MC25), the purchaser is required to respond to the warehouse discrepancy notification within 10 days, and either provide the warehouse with a Return Material Authorization (RMA) number and instructions to return the material to the supplier or correct the Company's material catalog and/or

¹ See GDS Report, p. 4.

² See Decision No. 69663, p. 158, line 15.

purchase order to update Company records, thereby allowing the receipt to be processed. When the receipt inspection is complete and the receipt has been processed, NQR material is released for stock. QR material, on the other hand, undergoes an additional inspection prior to release. Quality Control Inspectors inspect QR material (per Company Procedure 12DP-0MC46) against pre-established inspection criterion developed by the Company's Procurement Engineering department. That inspection criterion specifically identifies the quality and technical requirements for a given part, and is derived in compliance with standards issued by the American National Standards Institute (ANSI).

Whenever the Company identifies non-conformance issues related to any material received at the warehouse, it initiates a Warehouse Discrepancy Notice (WDN) as a means of classifying and controlling non-conforming material. Pursuant to Company policy (Procedure 12DP-0MC29), whenever a WDN is initiated, the material involved is segregated and placed into quarantine to prevent inadvertent use or release to the field. The WDN process allows for the release of material for installation after the identified defect has been corrected. WDNs are part of the Company's overall Corrective Action Program, and are initiated and resolved in accordance with applicable regulatory requirements and Company policy (Procedure 01DP-0AP10). Although WDNs tend to be initiated by Quality Control Inspectors, any person who identifies a non-conformance can and should initiate one. In addition, if the product's defect is one that could create a substantial safety hazard if it were to remain uncorrected, that defect must be reported to the Nuclear Regulatory Commission (NRC), pursuant to federal law. *See* 10 CFR Part 21.

The Company's Nuclear Assurance department oversees the quality control program at Palo Verde. In this role, Nuclear Assurance audits the plant's supply chain processes once every two years. Nuclear Assurance also oversees Palo Verde's Corrective Action Program, pursuant to which it establishes specific measures intended to identify and correct conditions that may be adverse to quality, such as defective material and equipment. Nuclear Assurance also attempts to prevent reoccurrence of such conditions by looking for trends related to QR material. The Nuclear Assurance vendor group maintains and controls the Palo Verde Approved Vendor Supply List (ASL), which governs Palo Verde's quality-related purchases. In this role, Nuclear Assurance participates in audits of ASL suppliers that are conducted by the Nuclear Utilities Procurement Issues Committee (NUPIC) in an effort to identify program weaknesses and enhance the quality of the material that is supplied to APS.

The Company conducted internal evaluations of the receipt inspection process in place at the Palo Verde warehouse. Specifically, the Company assessed the training and performance of each of the warehouse receipt inspectors based on the Company's expectations for the position. In addition, the Company's Nuclear Assurance department completed a trend analysis in which it analyzed recent corrective action documents in an effort to identify any potential issues relevant to the receipt inspection function.

The Company's evaluation of its receipt inspection process determined that, while the programs in place at Palo Verde generally promptly identified and initiated the correction of potentially defective material, the receipt inspection process nevertheless could be, and since has been, improved. According to the analysis conducted by the Nuclear Assurance department, during the 2006 calendar year, the warehouse processed 18,855 Purchase Order Line Item Receipts and 5,575 Restock Line Item Receipts. Of the almost 25,500 total receipts processed, 33 received a Corrective Action – a 0.05% error rate. Although low, the Company does not believe that this error rate is acceptable. The errors involved led to circumstances in which warehouse material was improperly stored and/or documented, which could cause the wrong material to be issued to the field or material to be issued without meeting the required criteria. Verification of the part is confirmed during the maintenance process, as described below in III.

In an effort to better control the material issued from the warehouse, the Company has identified specific areas for improvement related to both the receipt inspection process and the performance of its personnel under that process. Specifically, the Company determined that its receipt inspectors were trained on the required protocol informally, which may be less precise in educating inspectors on the specific documentation procedures and inspection criterion than a formalized training would be. Moreover, the Company concluded that the warehouse environment was potentially disruptive to receipt inspectors (both in terms of noise and warehouse "clutter"), and that workplace distractions and interruptions should be reduced. The Company's investigation also showed that receipt inspectors occasionally moved from one task to another before completing the first, which was inefficient and lent itself to errors in documentation.

In order to address these areas for improvement, the Company has taken the following corrective actions. First, it has strengthened its receipt inspection procedures by adding foreign material exclusion requirements and an additional check to verify that chemicals received comply with the chemical permit that allows their use at Palo Verde. Second, it has attempted to reduce workplace distractions and interruptions by restricting the warehouse to authorized personnel. The Company has also taken steps to improve its housekeeping at the Palo Verde warehouse in order to reduce workplace clutter and give receipt inspectors a cleaner environment in which to work. Finally, the Company is in the process of developing a formal receipt inspector training program, which will be implemented effective December 31, 2007. In an effort to ensure that these corrective actions were properly executed, this matter has received heightened scrutiny by the Nuclear Assurance department. But for the revisions to the training program (which will be implemented at the end of this year), the warehouse has addressed each of the corrective action items identified and Nuclear Assurance has confirmed that the warehouse was successful in improving performance as of October of 2007.

II. Verification of Parts Prior to Installation

The Company has detailed protocol in place at Palo Verde that governs the installation of material onto plant systems, components, and structures and that contains

multiple safeguards. Personnel doing maintenance are not permitted to alter, change or modify plant equipment, including material configuration, without an approved work document authorizing and specifying such changes. Personnel are required to verify that the parts installed on permanent plant equipment or components are as specified in the document governing the work (the "work order"). Should the work be of a minor nature and detailed instructions are not provided to the technician, the maintenance technician is required to refer to approved design output documents in order to ascertain the appropriate acceptance criteria and material verification. Procedure 30DP-9MP01, *Conduct of Maintenance*, requires these controls as a means of preventing the incorrect or uncontrolled use of parts in the plant.

When parts are needed to complete a work order, the maintenance planner reviews the approved Bill of Materials (BOM) database to determine if there are approved parts or materials needed for the work being performed. The BOM is one of several design output documents approved for use at Palo Verde that contains a list of the various materials authorized for use at the plant. By reviewing the BOM, the planner verifies that the materials and parts listed in the work order have been purchased consistent with the quality classification of the original equipment. This procedure is intended to prevent the installation of a non-quality part onto quality related equipment.

The BOM is contained in Palo Verde's Site Work Management System (SWMS), an integrated software system used throughout the plant. Should the maintenance planner order material that is not listed on an approved BOM, the SWMS flags the order by generating a BOM "exception," which alerts the Planner that the material ordered is not found on the BOM. Before the exception can be overridden (a necessary step in the process), the maintenance planner must validate the order by entering an alternative approved design output document that contains the material at issue. The design output document used for this validation is to be entered into either the "Documents" block or the "Exception comment" column of the Exceptions sub-form in SWMS. If a BOM exception is overridden using what is known as an engineering "Material Equivalency Evaluation," a change document is generated pursuant to engineering procedure 87DP-0CC17, *Control of Engineering Data in SWMS*, for the update of the component's BOM. A BOM exception may be overridden without a design output document only when the material will be used to support work for "out of service" equipment. The Company has procedures in place that require such material to be removed before the equipment is placed in service. Plant Procedure 30DP-0AP01, *Maintenance Work Order Writer's Guide*, requires the use of these barriers and controls before parts may be sent to the field.

The final step in the process to confirm the functionality of installed parts is to perform post-maintenance testing, which is controlled by procedure 30DP-9WP04. Acceptance criteria for the specific retest must be met before the work order can be considered complete.

In analyzing its procedures and the performance of its maintenance planners under this protocol, the Company has found one notable area for improvement. As part

of its evaluation, the Company reviewed the BOM exceptions that Palo Verde personnel entered into the SWMS since January 1, 2005. During this review, the Company identified various instances in which a maintenance planner entered a BOM exception without justifying the use of such exception by listing an acceptable alternative design output document. Based on the review, an appropriate design document was not readily identified for 124 parts specified within the SWMS screens for the work order.

As a result of these assessment findings, the Company performed an additional review of all BOM exceptions generated since the SWMS was implemented. The list of BOM exceptions was sorted by individual planner, and each planner then reviewed BOM exceptions specific to the work they had performed. The review identified a number of BOM exceptions that had not been overridden as required by Company protocol. Separate corrective action documents were generated to address each of these exceptions. Although no impact to the plant resulted from these overridden exceptions, plant staff recognized that this issue was a significant concern and treated it with utmost importance. Upon discovering the issue, the Company immediately initiated the following corrective actions. Palo Verde management imposed additional planner training regarding the correct method to override a BOM exception, the Company enhanced the SWMS to improve the man-machine interface and clarify the procedures governing BOM exceptions, and the Company revised the procedure that controls engineering data within the SWMS to make it easier to identify controlled fields in the database.

This evaluation does not end the Company's efforts to improve its receipt inspection and material verification procedures. To the contrary, through the Corrective Action Program, benchmarking procedures, employee self-assessments, and the Company's Palo Verde Operating Experience review, Palo Verde is continuing to make program improvements for receipt inspection and verification of parts received prior to installation.